OCTOBER 1.

Dr. CARSON, Vice-President, in the chair.

Eighteen members present.

The following papers were presented for publication:—

"Catalogue and Synonymy of the Family Astartidæ." By GEO. W. TRYON, Jr.

"Catalogue of the Family Solemyidæ." By GEO. W. TRYON, Jr.

Notice of a Corundum Mine.—Prof. LEIDY remarked that he had visited a corundum mine recently opened on the farm of Mr. George Ball, in the vicinity of Unionville, Chester Co., Pa. The accumulation is perhaps the most extraordinary discovered, and its extent yet remains unknown. Detached crystals of corundum have often been found in the ploughed fields and roadsides of the neighborhood, and also masses or boulders of the same material have been discovered on the surface of the ground or buried in the local drift covering the deeper rocks. In several instances boulders of nearly pure corundum have been found in the locality up to several tons in weight. A company was led to seek for this important mineral, and for the purpose sunk a shaft in a neighboring hill of albite, but without success. Mr. John Smedley, an intelligent farmer, employed by the proprietors of the mine, was led to the discovery of the corundum by noticing the direction of the boulders in the surface drift. Tracing it to the top of the hill, he found it about five feet below the surface.

The corundum, as exposed to view at the bottom of a trench, appears as the crest of a large body or vein lying between a decomposing gneiss and a white talcose schist. The vein appears to extend in a western direction and towards the east turns at an obtuse angle to the northeast. The exposed portion may probably reach twenty or more feet and averages about six feet in depth and five feet in thickness at bottom, and is estimated to contain about fifty tons. How much further the vein extends west and northeast, and how far it reaches in depth and thickness, can only be determined by future mining. It looks as if it promised to be the most valuable deposit of corundum ever found.

The rock on the south side of the vein is the white talcose schist above mentioned. In immediate contact with the corundum it appears to be metamorphosed into the material described a few years ago by our fellow member, Mr. Lea, under the name of Lesleyite. The schist on the declivity of the hill is contiguous to steatite and serpentine.

The corundum is the pure material, and is not emery. The masses are made up of a close aggregation of crystals with the intervals occupied with margarite. Some of the fissures and surfaces of the masses display large and beautiful crystalline plates of margarite, and occasionally unusally fine crystals of diaspore. Some of the crystals of corundum appear to have undergone partial metamorphosis into margarite. The corundum is bluish-gray, of very compact texture, and does not cleave so readily as the North Carolina mineral.

The various specimens of corundum and other minerals found in association with it, presented to the Academy this evening by Mr. Ball, were obtained at the locality described.

OCTOBER 8.

The President, Dr. RUSCHENBERGER, in the chair.

Seventeen members present.

Mr. THOMAS MEEHAN remarked, that as botanists well knew, *Quercus prinoides* seldom grew more than two feet in height. It was one of the smallest of shrubs. In his collections in Kansas, he found oaks in the vicinity of Leavenworth, which made small trees from ten to fifteen feet high, and with stems from one to two feet in circumference. He was entirely satisfied that it is identical in every respect but size with the *Q. prinoides* of the eastern States.

Among trees there are few which produce forms as low shrubs; but the *Pinus Banksiana*, in the East but a bush of five or ten feet, grew often forty feet along the shores of Lake Superior; the *Castanea pumila*, Chinquapin chestnut, when it gets out of the sands of New Jersey into the clayey soils west of the Delaware, often grew as large as many full grown apple trees; while the *Celtis occidentalis*, which in the East is generally but a straggling bush along fence corners, is in Ohio a large spreading tree with enormous trunk, and in Indiana is as lofty and as graceful as an elm.

He also exhibited a section of a stem of *Wistaria sinensis*, and called the attention of members to a curious arrangement of the wood and bark. The vertical section showed by the annual rings of wood that it was about twelve years old. After the eighth year's circle there was a layer of bark, and over this layer two more circles of wood. On a portion of the section another layer of bark had formed between the tenth and eleventh years' circles of wood. The bark seemed to be wholly of liber, the cellular matter and external cortical-layer of the regular bark appeared to be wanting. A longitudinal section showed where these internal layers of bark extended no further upwards, and at this point there